(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 18 March 2004 (18.03.2004)

(10) International Publication Number WO 2004/022617 A1

(51) International Patent Classification7: C08F 289/00

(21) International Application Number:

PCT/EP2003/009410

- (22) International Filing Date: 26 August 2003 (26.08.2003)
- (25) Filing Language:

(26) Publication Language:

English

(30) Priority Data:

02405763.0 4 September 2002 (04.09.2002)

- (71) Applicant (for all designated States except US): CIBA SPECIALTY CHEMICALS HOLDING INC. [CH/CH]; Klybeckstrasse 141, CH-4057 Basel (CH).
- (72) Inventors; and
- Inventors/Applicants (for US only): WUNDERLICH, Wiebke [DE/IT]; Via Valdossola, 28, I-40134 Bologna (IT). PFAENDNER, Rudolf [DE/DE]; Sackgasse 3, 64668 Rimbach (DE). FUSO, Francesco [IT/CII]; Bienenweg 8, CII-4106 Therwil (CII). FINK, Jochen [DE/DE]; Kurt-Schumacherstrasse 16, 69226 Nussloch (DE).
- (74) Common Representative: CIBA SPECIALTY CHEMI-CALS HOLDING INC.; Patentabteilung, Klybeckstrasse 141, CH-4057 Basel (CH).

radical conditions a comb or star structure onto this back bone.

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF PRODUCING COMB OR STAR COPOLYMERS USING EPOXY-FUNCTIONALIZED NITROX-

YLETHERS (57) Abstract: The present invention provides a method of attaching a polymeric side chain differing in polarity and chemical structure from the backbone and forming a comb or star copolymer structure. In particular the process provides a method of polymerizing in a first step a polymer back bone from epoxy group containing monomers and in a second step polymerizing under controlled

